

OKADA et al. - 09/973,929
Attorney Docket: 007324-0283788

REMARKS

Claims 1 and 4-16 are pending. By this Amendment, the specification is amended and claim 1 is amended. Reconsideration in view of the above amendments and following remarks is respectfully requested.

The Examiner states that the IDS submitted July 5, 2005 has not been considered because the Japanese Office Action and the English translation of the cited reference, JP 8-266854 were not found. The undersigned has reviewed the Image File Wrapper (IFW) for this application and notes that on July 5, 2005, a 19 page foreign reference was clearly entered in the IFW. That 19 page foreign reference is the copy of JP 8-266854 submitted by the undersigned on July 5, 2005, including the English abstract and the English translation.

Enclosed is a PTO-1449 listing JP 8-266854. The Examiner is respectfully requested to consider the reference, initial, sign and date the PTO-1449 and provide the undersigned with a copy with the next Office Action in accordance with MPEP § 609.

Claims 1, 5, 6 and 8-16 were rejected under 35 U.S.C. §103(a) over Kang et al. (U.S. Patent 5,230,220) in view of Maruda et al. (U.S. Patent 5,078,971), Yamamoto et al. (JP 59-12732) and Gellert (U.S. Patent 5,136,170). The rejection is respectfully traversed.

Claim 1 recites a refrigerator in which a deodorizer is provided in a cold air circulation path for deodorizing an atmosphere in the refrigerator. The refrigerator comprises a heat exchanger having a cold air inlet. The deodorizer comprises discharging means having a plurality of wire-shaped discharge electrodes disposed across the cold air circulation path and a flat counter electrode. The discharging means produce ozone and ultraviolet rays by means of high-voltage discharge. The counter electrode has a number of slits formed therethrough so that cold air for refrigeration flows through the slits, the slits being arranged so that the cold air flows therethrough across the counter electrode. A photocatalyst module is provided between the discharged electrode and the counter electrode for decomposing an odor component and injurious matter contained in the atmosphere by means of photocatalyst. An ozone decomposing means for decomposing the ozone produced by the discharging means is disposed at a downstream side of at least the discharging means and the photocatalyst module with respect to a direction in which the cold air flows and further in the cold air inlet of the heat exchanger.

With respect to the two new references, Gellert and Yamamoto et al., Applicants provide the following response.

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Gellert is clearly non-analogous prior art, as it is neither in Applicants' field of endeavor nor reasonably pertinent to the particular problem with which Applicants were concerned.

MPEP § 2141.01(a) states: "The examiner must determine what is 'analogous prior art' for the purpose of analyzing the obviousness of the subject matter at issue. 'In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.'" MPEP § 2141.01(a) further states: "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem."

Gellert is directed to an irradiation device for drying and/or curing paints, varnishes and similar coatings. The disclosure of Gellert has nothing at all to do with refrigeration and no person of ordinary skill in the art of refrigeration would have looked to the disclosure of Gellert when considering the particular problems with which Applicants were concerned. As such, the Examiner may not rely on Gellert as a basis for rejection of Applicants' claims.

With respect to Yamamoto et al., MPEP § 706.02II states: "Prior art uncovered in searching the claimed subject matter of a patent application often includes English language abstracts of underlying documents, such as technical literature or foreign patent documents which may not be in the English language. When an abstract is used to support a rejection, the evidence relied upon is the facts contained in the abstract, not additional facts that may be contained in the underlying full text document. Citation of and reliance upon an abstract without citation of and reliance upon the underlying scientific document is generally inappropriate where both the abstract and the underlying document are prior art." MPEP § 706.02II further states: "To determine whether both the abstract and the underlying document are prior art, a copy of the underlying document must be obtained and analyzed. If the document is in a language other than English and the examiner seeks to rely on that document, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection. The record must also be clear as to whether the examiner is relying upon the abstract or the full text document to support a rejection. The rationale for this is several-fold. It is not uncommon for a full text document to reveal that the document fully anticipates an invention that the abstract renders obvious at best. The converse may also be true, that the full text document will include teachings away

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from the invention that will preclude an obviousness rejection under 35 U.S.C. 103, when the abstract alone appears to support the rejection. An abstract can have a different effective publication date than the full text document. Because all patentability determinations are fact dependent, obtaining and considering full text documents at the earliest practicable time in the examination process will yield the fullest available set of facts upon which to determine patentability, thereby improving quality and reducing pendency. When both the abstract and the underlying document qualify as prior art, the underlying document should normally be used to support a rejection. In limited circumstances, it may be appropriate for the examiner to make a rejection in a non-final Office action based in whole or in part on the abstract only without relying on the full text document. In such circumstances, the full text document and a translation (if not in English) may be supplied in the next Office action. Whether the next Office action may be made final is governed by MPEP 706.07(a)." (Underlining emphasis added.)

From page 4, lines 8-10, of the Office Action, it appears that the Examiner is relying on the English abstract of Yamamoto et al. However, as the above discussed MPEP section makes clear, the Examiner must provide a translation of Yamamoto et al. to provide Applicants the opportunity to fully traverse the rejection, for example should Yamamoto et al. teach away from the claimed invention. The Examiner is respectfully requested to provide a translation of Yamamoto et al., or withdraw the rejection.

MPEP 707.07(f) states: "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it."

In the response filed July 5, 2005, Applicants clearly argued that there is no disclosure or suggestion, absent Applicants, to combine the sterilizing/deodorizing section 20 including the discharge lamp 21 of Kang et al. with the deodorizer device 12 including the absorption unit 3 of Matuda et al. On page 4, lines 11-14, of the Office Action the Examiner repeats, verbatim, the allegation that it would have been obvious to utilize a photocatalyst in the deodorizer of Kang et al. because Matuda et al. clearly teach its efficacy in refrigerator deodorization. However, the Examiner provides no response to Applicants' arguments due to the addition of Yamamoto et al. and Gellert to the combination.

Applicants respectfully resubmit that there is no disclosure or suggestion, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to combine the sterilizing/deodorizing section 20 including the discharge lamp 21 of Kang

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et al. with the deodorizer device 12 including the absorption unit 3 of Matuda et al. In the event that the Examiner maintains the combination of Kang et al. with Matuda et al., in addition to Yamamoto et al. and Gellert, the Examiner is respectfully requested to answer Applicants' traversal.

As also argued in the previous response, there is no disclosure or suggestion by either Kang et al. or Matuda et al. of 1) a photocatalyst module provided between the discharge electrodes and the counter electrodes for decomposing and odor component and injurious matter contained in the atmosphere by means of photocatalyst. There is also no disclosure or suggestion by either Kang et al. or Matuda et al. of 2) ozone decomposing means for decomposing the ozone produced by the discharging means, the ozone decomposing means being disposed at a downstream side of at least discharging means and the photocatalyst module with respect to a direction in which the cold air flows and further in the cold air inlet of the heat exchanger. The residual ozone removing section 30 of Kang et al. is not disclosed as being in the cold air inlet of the heat exchanger of a refrigerator.

Yamamoto et al. and Gellert fail to cure the deficiencies of Kang et al. and Matuda et al. Neither Yamamoto et al. nor Gellert discloses a photocatalyst module provided between discharge electrodes and a counter electrode or an ozone decomposing means disposed at a downstream side of at least discharging means and the photocatalyst module with respect to a direction in which the cold air flows and further in the cold air inlet of a heat exchanger.

With respect to Yamamoto et al., the Examiner, on page 4, lines 14-17 of the Office Action, alleges that it would have been obvious to employ discharge means including a plate electrode and wire electrodes, "with placement of the photocatalyst between the electrodes because such placement would ensure maximum exposure of the photocatalyst to the generated UV radiation." Yamamoto et al. disclose a post stage activated carbon catalyst layer 6 that is not disposed between the plate electrodes 2 and the wire electrode 3. The Examiner's conclusion that it would have been obvious to place a photocatalyst module between the electrodes of Yamamoto et al. is nothing more than an exercise in impermissible hindsight reconstruction of the claimed invention. Yamamoto et al. do not disclose or suggest such an arrangement, nor do any of the other three references.

It is respectfully submitted that the combination of these four references, none of which discloses or suggests the two features discussed above, can not possibly present a *prima facie* case of obviousness.

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Claim 1 further recites that the counter electrode having a number of slits formed therethrough so that cold air for refrigeration flows through the slits, the slits being arranged so that the cold air flows therethrough across the counter electrode. None of the four combined references disclose or suggest such an arrangement.

Claims 5, 6 and 8-16 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 1 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) over Kang et al. in view of Matuda et al. are respectfully requested.

Claim 4 was rejected under 35 U.S.C. §103(a) over Kang et al. in view of Matuda et al., Yamamoto et al. and Gellert, and further in view of Miyakami et al. (U.S. Patent 4,904,289) and claim 7 was rejected under 35 U.S.C. §103(a) over Kang et al. in view of Matuda et al., Yamamoto et al. and Gellert, and further in view of Kawashima et al. (U.S. Patent 4,955,208). The rejections are respectfully traversed.

Claims 4 and 7 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claim 1 and for the additional features recited therein. It is also respectfully submitted that Miyakami et al. and Kawashima et al. both fail to cure the deficiencies of the combination of Kang et al., Matuda et al., Yamamoto et al. and Gellert discussed above with respect to claim 1. Accordingly, even assuming it would have been obvious to combine references, the combination would not include all the limitations of base claim 1 and would not present a *prima facie* case of obviousness against claims 4 and 7.

Reconsideration and withdrawal of the rejections under 35 U.S.C. §103(a) over Kang et al., Matuda et al., Yamamoto et al. and Gellert, and Miyakami et al., and Kawashima et al. are respectfully requested.

In view of the above amendments and remarks, Applicants respectfully submit that all the claims are allowable and that the entire application is in condition for allowance.

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Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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